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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,734	12/13/2001	Robert E. Medsker	GT-5420 (GC-GU)	8884

7590

04/18/2003

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EXAMINER

ASINOVSKY, OLGA

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 04/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/015,734

Applicant(s)
Medsker et al

Examiner
Olga Asinovsky

Art Unit
1711



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 3, 2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above, claim(s) 21-34 and 41-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 35-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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DETAILED ACTION

1. Applicants' election with traverse of Group I, claims 1-20 in Paper No. 4 is acknowledged.

Claims 35-40 stands together with Group I because independent claim 35 discloses a fluorine-containing block copolymer comprising a polyoxetane block and a hydroxyl terminated a hydrocarbon polymer block. Claims 35-40 was mistakenly omitted in the restriction requirement. Claims 1-20 and 35-40 are under the examination.

There is no specifically argument in the errors in the restriction requirement.

Claims 21-34 and 41-43 are withdrawn.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 and 35-40 are rejected under 35 U.S.C. 102(b) as being anticipated by

Hargis et al U.S.Patent 5,674,951 (cited by applicants in the IDS).

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The present invention in claim 1 is a polymeric composition comprising at least one polyoxetane block connected to at least one hydrocarbon block wherein a said polyoxetane block is fluorinated and having the specific structure in claim 1 and a hydrocarbon block can be olefin (co)polymer derived from at least one olefin monomer having from 2 to about 8 carbon atoms; or a hydrogenated diene (co)polymer derived from at least one conjugated diene monomer having from 4 to about 10 carbon atoms.

Independent claim 35 discloses a fluorine-containing block copolymer composition, comprising the reaction product of a plurality of oxetane monomers, having the formula specified in claim 35, with a mono or polyhydroxyl terminated hydrocarbon polymer comprising an olefin (co)polymer derived from at least one olefin monomer having from 2 to about 8 carbon atoms; or a hydrogenated diene (co)polymer derived from at least one conjugated diene monomer having from 4 to about 10 carbon atoms.

Hargis discloses a polymeric composition comprising a block copolymer having oxetane repeat units with fluorinated side chains and repeat units of nonfluorinated alkylene oxide units, column 2, lines 39-40 and line 50-51. The oxetane monomers represented by the formula at column 2, lines 15-20 would be readable in applicants' claim 1, wherein the applicants' claimed DP repeat unit from at least about 2 would be expected in the polyoxetane polymer in Hargis, and because the DP repeat unit in the present claim 1 is a polyoxetane block. The polyoxetane polymer is highly fluorinated such that in the R_f portion at least 50% of hydrogens in the alkyl

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groups are replaced by fluorine atoms, column 2, lines 3-7, for the present claim 1. Hargis discloses that it is desirable to incorporate nonfluorinated poly(alkylene oxide) diols and polyols and/or poly(ester) diols or polyols, column 2, lines 27-30. Also, the polyoxetane polymers can be diluted with other hydroxyl terminated polymers having number average molecular weights from about 400 to about 10,000, column 3, lines 6-7 and 14. The hydroxyl terminated hydrogenated diene polymers having a number average molecular weight from 1,000 to 8,000, column 4, lines 18-19 and 29, are readable in the present claims 1, 6, 7, 35, 38 and 39. Polybutadienes containing terminal hydroxyl groups can be included, column 3, lines 46-47, for all present claims, because the term "connected" in claim 1, line 2, can include a chemical reaction or blended or diluted. And, also, a hydroxyl terminated hydrogenated diene polymer is readable in the present claims 1 and 35 as a hydrocarbon block. The hydroxyl terminated polybutadiene is reacting with an oxetane monomer, for the present claim 35. The oxetane monomers may include other cyclic ether monomer such as tetrahydrofuran, column 12, lines 19-21, for the present claim 1. The formation of the reaction product of the fluorinated polyoxetane block with a compound having a cyclic ether group (epoxy group) is disclosed at column 8, line 60, that is readable in the present claim 35. The fluorinated polyoxetane block copolymer can be used for coating purposes for plastics, fibers and fabrics, column 12, lines 41-46. Plastics made of polyolefin is inherent for the present claims 13-20. Using a fluorinated polyoxetane block copolymer as a coating composition for coating any thermoplastic article including a fiber and fabric would be expected in Hargis' invention.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art is relevant to show the state of the art knowledge.

Sheet 2 in the Form 1449 has a typographic error. The references cited on sheet 2 are retyped by the examiner on Form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is (703) 308-0041. The examiner can normally be reached on Monday to Friday from 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on (703) 308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 and (703) 872-9311 after final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

O.A.

O.A.

April 8, 2003

James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700